

thoracic width. Male sexual orifice situated above the interval between the legs of the first and second pairs.

Note.—In one male specimen the tracheal tubes leading from the capitulum are quite distinct; each is at first double, but afterwards fuses to form a single wide lateral main trunk.

Host: *Apodemus sylvaticus*.

Demodex nanus, sp. n.

♀. A minute species very like that present in *Sorex vulgaris castaneus*. Length varying from less than 3 up to slightly more than $3\frac{1}{2}$ times the width of the cephalothorax. Abdomen considerably shorter than combined length of cephalothorax and capitulum. Capitulum usually much wider than long; the spines on its surface apparently obsolete or absent.

Total length 87–102 μ .

Host: the black rat (*Rattus rattus*), a number of specimens collected by the author from a freshly killed rat.

Note.—Hahn has already described a species of *Demodex* (*D. ratti*) from a house-rat said to be *Mus rattus*. I have not been able to consult his original description, which is referred to by Gmeiner. The latter says the species is like that of the dog. From this one would infer that it was an elongated form of comparatively considerable size, similar to that found in *Rattus norvegicus*.

It is probable, indeed, that the rat from which Hahn's specimens were taken was really *Rattus norvegicus*, the brown or Norwegian rat (syn. *Mus decumanus*). It is, of course, possible that two species occur in *Rattus rattus*, as is certainly the case in *Apodemus sylvaticus*.

XII.—*New Species of Gerbillus and Taterillus.*

By OLDFIELD THOMAS.

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Gerbillus allenbyi, sp. n.

A small species, with short feet and tail; probably allied to *G. agag*.

General colour much more mouse-grey than the usual tone of gerbils, markedly greyer than *G. gerbillus*; head, shoulders, and most of the upper surface near "cinnamon-buff," but

the middle dorsal area greyer, though this difference may be less marked in older specimens. Under surface less absolutely pure white than usual, the hairs, especially in the inguinal region, with a slight tinge of buffy. Postorbital light patches present, but not very sharply defined; below them on each side, between eye and ear, there is a distinct patch of grey hairs. Ears with proectote buffy, the rest whitish; post-auricular white patch sharply defined. Hands and feet white, but a slight tendency to buffy appears on the wrists; soles all hairy except for a small round patch on the heel. Tail not proportionally long; dull buffy, little lighter below; its terminal dark crest inconspicuous.

Skull of the general build of that of *G. gerbillus*, but the bullæ smaller. Supraorbital beads little developed.

Dimensions of the type (measured in flesh) :—

Head and body 70 mm. ; tail 95; hind foot 24; ear 9.

Skull : greatest length 26·2; condylo-incisive length 23; zygomatic breadth 14·5; nasals 9·6; interorbital breadth 5·2; breadth of brain-case 13·3; zygomatic plate 3·9; palatal foramina, anterior 4·4, posterior 2·2; greatest horizontal diagonal diameter of bulla 9·2; breadth of bulla at right angles to last, exclusive of meatus, 5·7; upper molar series 4.

Hab. Coast region of Palestine. Type from Rehobot, near Jaffa.

Type. Young adult male. B.M. no. 14. 5. 29. 5. Original number 8. Collected 3rd February, 1914, by T. Aharoni. Presented by the Hon. N. Charles Rothschild.

This is evidently the species which Nehring* assigned to *G. longicaudus*, Wagn. But Wagner's animal, which I have seen in Munich, was from Egypt, and was clearly referable to *G. gerbillus*, as has been shown by Anderson and de Winton.

The Palestine gerbil seems to be related to *G. agag*, Thos., but is readily distinguishable by its less bright colour, greyer back, and the greyish patches between eye and ear.

I have named it in honour of the general to whose forces the country where it occurs owes release from the barbarian domination under which it has suffered for so many centuries.

Gerbillus acticola, sp. n.

Near *G. pygargus*, but the bullæ larger.

Size and colour as in *G. pygargus*, of the same light desert-colour—quite unlike that of *G. dunni* of Central

* SB. Ges. Fr. Berl. 1901, p. 173.

Somaliland. Compared with a series from Shendy, the ground-colour is warmer, being near "warm buff" in *pygargus*, while it is "pinkish cinnamon" in *acticola*; but the variation in the colour of these desert-animals is so great that not much stress can be laid upon it. Sides lighter, line of demarcation high up. Postorbital and postauricular white patches well marked. Fore limbs wholly, hind limbs mostly white. Hind soles with a nearly naked stripe running along the inner side almost to the base of the hallux. Tail buffy above, white below; the terminal crest inconspicuous, brown.

Skull of the same stoutly built elongated form as in *pygargus*, the supraorbital beads similarly strongly developed. Bullæ of similar shape, but decidedly larger than in any of the considerable series available of *pygargus* and *pyramidum*.

Dimensions of the type (measured in the flesh):—

Head and body 118 mm.; tail 144; hind foot 29; ear 15.

Skull: greatest median length 32.5; greatest diagonal length 32; condylo-incisive length 28.5; zygomatic breadth 17.4; nasals 12.7; interorbital breadth 6.6; breadth of brain-case 14.5; breadth between meatal edges 16.3; zygomatic plate 4.7; palatal foramina, anterior 5.4, posterior 3; bullæ, horizontal diagonal length 12; breadth at right angles to last, excluding meatus, 7; greatest diameter in any direction 12.7; upper molar series 4.1.

Hab. Coast region of N. Somali. Type from Berbera, other specimens from Bulhar.

Type. Adult female. B.M. no. 7.11.5.4. Original number 32. Collected 30th July, 1905, and presented by Dr. R. E. Drake Brockman. Nine specimens.

This Somali representative of *G. pygargus*, distinguished by its larger bullæ, is the species mentioned on p. 119 of Dr. Drake Brockman's 'Mammals of Somaliland' (1910) as the Coast Gerbil, a title I have Latinized as above.

Gerbillus vallinus, sp. n.

A *Gerbillus* with an unusual amount of the soles naked and with very large bullæ.

Size about as in *G. pæba*. Fur long and loose. General colour strong sandy buffy, near "cinnamon-buff," not so inclined to russet as in *G. pæba*. Line of demarcation on sides not very sharply defined. Lighter postorbital and postauricular markings scarcely perceptible. Ears short, their

proectote buffy like the general colour. Fore limbs wholly in the white area, without any darker colour on their front surface. Soles less haired than in other members of *Gerbillus*, the naked area extending from the heel along the middle of the sole to the level of the base of the hallux, but the region of the pads is closely and profusely hairy, as usual in the genus. Tail at base pale buffy above, whitish below—its terminal portion lost in the type.

Skull remarkable for the great size of the bullæ, which tend to recall those of *Desmodillus* and far exceed those of any other member of this genus. The posterior breadth of the skull is therefore unusually great. Muzzle slender. Supra-orbital beads present. Zygomatic plate more projected forward than in most species of *Gerbillus*, and almost approaching the projection characteristic of *Taterillus*; the same is the case in *G. pabu*. Palatal foramina, both anterior and posterior, large and well open. Bullæ greatly swollen, the anterior edge of the meatus also inflated; a well-marked vacuity just beneath the opening of the meatus.

Dimensions of the type (measured in the flesh):—

Head and body 92 mm.; tail (60+); hind foot 30; ear 15.

Skull: greatest median length 29; greatest diagonal length 30; condylo-incisive length 27; zygomatic breadth 16; nasals 11·2; interorbital breadth 6; breadth of braincase 14·3; breadth between outer edges of meatal inflations 16·8; zygomatic plate 4·8; palatal foramina, anterior 5·2, posterior 2·5; greatest horizontal diagonal diameter of bulla 10·7; greatest diameter in any direction 12·2; upper molar series 4·2.

Hab. Bushman-land. Type from Tuin, near Kenhart, Hartebeest River, near 29° S., 21° E.

Type. Adult male. B.M. no. 12. 1. 11. 2. Presented alive by Maj. H. A. P. Littledale to the Zoological Society, by whom it was transferred on death to the National Collection.

This well-marked species is readily distinguishable by its greatly enlarged bullæ, which tend to approach in size those of *Desmodillus auricularis*, obtained in the same region by Major Littledale. The hind feet of this animal are also more naked than in other members of *Gerbillus*, but have, however, the characteristic distal cushion which distinguishes the genus from *Dipodillus*.

Taterillus gyas, sp. n.

A *Taterillus* with decidedly larger skull than any other.

Size rather, but not conspicuously, larger than in *T. emini*. General colour above strong and dark, near "cinnamon," or even approaching "tawny"; sides cinnamon-buff. Ears rather large. Hands and feet white; soles quite without any trace of the usual transverse band of fur. Tail long, its basal half brownish above, dull buffy below; terminal tuft well developed.

Skull conspicuously larger and more heavily built than in any known *Taterillus*. Interorbital region rather more parallel-sided than usual, the supraorbital ridges strongly developed. Posterior palatal foramina extending from the level of the front root of m^1 to the middle of m^2 . Bullæ of average proportional size.

Dimensions of type (measured in flesh):—

Head and body 127 mm.; tail (damaged in type, 175 mm. in another specimen of about the same size); hind foot 34; ear 21.

Skull: greatest length 39; condylo-incisive length 35; zygomatic breadth 19.5; nasals 15.6; interorbital breadth 7.3; breadth of brain-case 15.8; zygomatic plate 7.3; palatal foramina, anterior 7.2, posterior 4.6; horizontal diagonal diameter of bulla 10.2; upper molar series 5.5.

Hab. Kamisa, Dinder R., Sudan.

Type. Adult female. B.M. no. 14. 3. 8. 24. Original number 55. Collected 26th December, 1913, by Willoughby P. Lowe, and presented by Abel Chapman. Two adult and six young specimens examined.

This *Taterillus* is remarkable for its large size and the complete absence of the hairy band across the soles. It thus considerably resembles the members of the genus *Taterona*. But its elongate posterior palatine foramina show that its place really is in this genus, all the more that *T. gracilis* proves to be variable in the development of the same hairy band. In that species the band is commonly absent, fairly often slightly or partially developed, and occasionally fully developed, all extremes occurring in any one locality. This species ranges eastwards from the Gambia to Upper Nigeria, where it occurs side by side with *T. nigerie* on the Bauchi Plateau. The latter was first described from a single specimen, but about a score of gerbils have been more recently sent by Mr. Fox, and were all supposed to be of the same species as the first. I now find, however, that they

are mostly referable to *T. gracilis*, only four belonging to *T. nigerie*, which may be distinguished by its larger size, longer anterior palatine foramina, and uniformly longer feet, and these in all four examples have well-developed sole-bands.

XIII.—*A new Duiker from Zanzibar.*

By OLDFIELD THOMAS.

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THE British Museum has received from Dr. W. M. Aders, Government Biologist at Zanzibar, native skins of three local Ungulates, two antelopes and a *Potamochoerus*. One of the former is that of a *Nesotragus moschatus*, but the other represents a duiker quite distinct from any species hitherto described.

In honour of its donor, to whom the Museum is indebted for many Zanzibar mammals, it may be called

Cephalophus adersi, sp. n.

Allied to *C. weynsi**, but with whitish bands across thighs and a white tufted tail.

Size and general characters about as in *C. weynsi* of the Congo. Line along nape with reversed fur, as in that species. General colour of withers and nape dark brown (near tummy-brown), which gradually becomes more rufous (darker than "avellaneous") on the shoulders and flanks, and posteriorly on the rump passes into deep rich chestnut-rufous ("mahogany-red" where richest). Under surface whitish, not sharply defined laterally, the hairs pale drabby at base, whiter terminally; a mesial rufous patch on the chest. Fore limbs with the avellaneous rufous of the shoulders passing down without interruption, but on the hind-quarters there is a broad whitish band running across the outer side of the hips and separating the chestnut-red of the rump from the rather paler red of the legs; this band is more or less rufous white where it commences on the sides above the inguinal glands, but becomes nearly pure white posteriorly, where it

* Figured and described, Ann. Mus. Congo, ii. p. 15, pl. vi. (1901).